

WHAT IS CLAIMED IS:

1. Process for applying double-layered rigidity strips to a sealable foil web which is transported in sequences, whereby V-shaped loops are formed at predetermined foil sections set at a distance from one another in a foil web transport direction, and whereby the sides forming the v-shaped loops are sealed to one another so that the then formed rigidity strips, extending transversely to the transport direction, project collar-like from the foil web, wherein a controlled auxiliary loop is arranged at each foil section in which a v-shaped loop is formed, which auxiliary loop serves for adaptation to format changes relating to the distances of the foil sections from one another.

2. A process according to claim 1, wherein respective auxiliary loops are controlled by means of notch markings or the like in the foil web.

3. A process according to claim 1, wherein respective auxiliary loops are maintained for many stages of the sequence during the transport of the foil web.

4. A process according to claim 2, wherein respective auxiliary loops are maintained for many stages of the sequence during the transport of the foil web.

5. A process according to claim 3, wherein respective auxiliary loops are maintained by means of clamping then to a transport means.

6. A process according to claim 5, wherein a plurality of said auxiliary loops are maintained simultaneously.

7. A process according to claim 1, wherein respective auxiliary loops are divided into two loops.

8. A process according to claim 2, wherein respective auxiliary loops are divided into two loops.

9. A process according to claim 3, wherein respective auxiliary loops are divided into two loops.

10. A process according to claim 5, wherein respective auxiliary loops are divided into two loops.
11. A process according to claim 6, wherein respective auxiliary loops are divided into two loops.
12. An arrangement for carrying out the process according to Claim 1, comprising:
 - a folding knife which forms the v-shaped loops,
 - two nipping jaw pairs arranged at the folding knife and clamping the foil web directly upstream and directly downstream of a respective one of the v-shaped loops,
 - a pressing device which presses the sides of the loops toward one another,
 - a heating device arranged at the pressing device, and
 - a transport roller arranged at the folding knife and driven in sequences,wherein the transport roller is a drum having a relatively large diameter and comprising devices along its circumference for forming a plurality of v-shaped loops and auxiliary loops.
13. An arrangement according to claim 12, wherein the pressing device comprises for each loop v-shaped two pressing jaws which rotate with the drum and which are movable in relation to one another, which pressing jaws form at the same time each a nipping jaw for the two nipping jaw pairs, whose other nipping jaws are arranged outside of the drum while being arrangeable to the drum.
14. An arrangement according to claim 13, wherein the pressing jaws are arranged with their areas forming the relative nipping jaw at various diameters of the drum.
15. An arrangement according to claim 12, wherein a joint folding knife, arranged outside of the drum, is provided for all the pressing devices.
16. An arrangement according to claim 12, wherein a joint format roller, arranged outside of the drum, is positioned for forming all the auxiliary loops.

17. An arrangement according to claim 12, wherein a sector of the drum includes a plurality of pressing devices and associated heating devices.
18. An arrangement according to claim 17, wherein a sector of the drum comprise cooling means arranged downstream of the sector.
19. An arrangement according to claim 12, wherein the auxiliary loop is controlled by means of notch markings in the foil web, and
wherein at least one sensor for scanning the notch markings of the foil web is arranged at the drum.
20. A process for making a foil web for use in producing packages, comprising:
transporting a sealable foil web in sequential transport steps in a web transport direction,
forming v-shaped loops in the foil web at predetermined foil sections spaced from one another in the web transport direction,
sealing sides of the v-shaped loops to one another to form rigidity strips which extend collar-like from the web transversely to the web transport direction, and
forming controlled auxiliary loops in each foil section in which a v-shaped loop is formed, said auxiliary loops serving to accommodate for different lengths of the respective foil sections.
21. A process according to claim 20, wherein said forming controlled auxiliary loops includes providing markings in the foil web indicative of the length of respective foil sections, and controlling the size of the auxiliary loops in response to detection of said markings.
22. A process according to claim 20, comprising maintaining respective auxiliary loops during a plurality of sequential transport steps.
23. A process according to claim 21, comprising maintaining respective auxiliary loops during a plurality of sequential transport steps.

24. A process according to claim 22, wherein said maintaining of the respective auxiliary loops includes clamping the respective auxiliary loops to a transport device carrying out the transporting of the foil web.

25. A process according to claim 24, comprising simultaneously maintaining a plurality of said auxiliary loops during transport of the foil web with the transport device.

26. A process according to claim 20, wherein the respective auxiliary loops each include a plurality of loop sections.

27. A process according to claim 20, wherein said transporting the foil web includes clamping the foil web to a transport roller which also carries mechanisms for forming the v-shaped loops and auxiliary loops.

28. Apparatus for making a foil web for use in producing packages, comprising:

transport means for transporting a sealable foil web in sequential transport steps in a web transport direction,

loop forming means for forming v-shaped loops in the foil web at predetermined foil sections spaced from one another in the web transport direction,

sealing means for sealing sides of the v-shaped loops to one another to form rigidity strips which extend collar-like from the web transversely to the web transport direction, and

auxiliary loop forming means for forming controlled auxiliary loops in each foil section in which a v-shaped loop is formed, said auxiliary loops serving to accommodate for different lengths of the respective foil sections.

29. Apparatus for performing a process for making a foil web for use in producing packages, comprising:

transporting a sealable foil web in sequential transport steps in a web transport direction,

forming v-shaped loops in the foil web at predetermined foil sections spaced from one another in the web transport direction,

sealing sides of the v-shaped loops to one another to form rigidity strips which extend collar-like from the web transversely to the web transport direction, and

forming controlled auxiliary loops in each foil section in which a v-shaped loop is formed, said auxiliary loops serving to accommodate for different lengths of the respective foil sections.

30. Apparatus according to claim 29, wherein the pressing device comprises for each v-shaped loop two pressing jaws which rotate with the drum and which are movable in relation to one another, which pressing jaws form at the same time each a nipping jaw for the two nipping jaw pairs, whose other nipping jaws are arranged outside of the drum while being arrangeable to the drum.

31. Apparatus according to claim 30, wherein the pressing jaws are arranged with their areas forming the respective nipping jaw at various diameters of the drum.

32. Apparatus according to claim 29, wherein a joint folding knife, arranged outside of the drum, is provided for all the pressing devices.

33. Apparatus according to claim 29, wherein a joint format roller, arranged outside of the drum, is positioned for forming all the auxiliary loops.

34. Apparatus according to claim 29, wherein a joint format roller, arranged outside of the drum, is positioned for forming all the auxiliary loops.

35. Apparatus according to claim 34, wherein a sector of the drum includes a plurality of pressing devices and associated heating devices.

36. Apparatus according to claim 35, wherein a sector of the drum comprise cooling means arranged downstream of the sector.

37. Apparatus according to claim 29, wherein the auxiliary loop is controlled by means of notch markings in the foil web, and

wherein at least one sensor for scanning the notch markings of the foil web is arranged at the drum.